

# Intracellular glycation and endothelial dysfunction : role of methylglyoxal

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**Stellingen**  
behorende bij het proefschrift

**Intracellular glycation and endothelial dysfunction;  
role of methylglyoxal**

- 1) Door methylglyoxaal geïnduceerde oxidatieve stress is verantwoordelijk voor een verminderde stikstofoxide-gemedieerde vasculaire relaxatie tijdens hyperglykemie. *(Dit proefschrift)*
- 2) Overexpressie van glyoxalase-I in ratten met diabetes vermindert de accumulatie van glyoxaal en methylglyoxaal, en daardoor de vorming van vergevorderde glyceringsproducten. *(Dit proefschrift)*
- 3) Het glyoxalase-I / methylglyoxaal systeem beïnvloedt de ontwikkeling van nefropathie in ratten met type 1-diabetes. *(Dit proefschrift)*
- 4) Ratten met type 1-diabetes worden gekarakteriseerd door een verlaagde bloeddruk die gedeeltelijk kan worden voorkomen door glyoxalase-I overexpressie. *(Dit proefschrift)*
- 5) Naast de ontdekkers van glyoxalase, waren Dakin & Dudley ook onbewust pioniers op het gebied van intracellulaire glycering.  
"It is interesting to note that phenyl glyoxal readily combines with histidine, arginine, ornithine and lysine to give sparingly soluble yellow substances. These compounds are under investigation." *(Dakin & Dudley, J Biol Chem 1913, 14:155-157)*
- 6) De beste buitenlandervaring voor een promovendus is minimaal vier weken per jaar op vakantie gaan.
- 7) De experimenten die je bedenkt krijgen pas waarde door de uitvoering.
- 8) Een significante interactie tussen "lab AIO's" en "computer AIO's" is positief geassocieerd met kwalitatief betere publicaties.
- 9) "Sticking feathers up your butt does not make you a chicken." *(Tyler Durden, Fight Club)*
- 10) "Am I part of the cure, or am I part of the disease?" *(Coldplay, Clocks)*

Olaf Brouwers  
Maastricht, 18 mei 2011